

**COMCAST BUSINESS SERVICES
PRODUCT-SPECIFIC ATTACHMENT
ACTIVECORESM MANAGED ROUTER SERVICE**

ATTACHMENT IDENTIFIER: ActiveCoreSM Managed Router Service, Version 2.1

The following additional terms and conditions are applicable to Service Order Agreements for Comcast's ActiveCoreSM Managed Router Service:

DEFINITIONS

Capitalized terms not otherwise defined herein shall have the meaning ascribed to them in the Business Services Customer Terms and Conditions.

“**ACD**” means a document containing details regarding the Customer Local Area Network (“LAN”) and/or Wide Area Network (“WAN”) which will enable Comcast to create the configuration for the Base Service.

“**Estimated Availability Date**” means the target date for delivery of a Service.

“**Service(s)**” means Comcast ActiveCoreSM Managed Router Service.

ARTICLE 1. SERVICES

This attachment shall apply to Comcast's ActiveCoreSM Managed Router Service which is delivered via Comcast's ActiveCoreSM platform. A further description of the Service is set forth in Schedule A-1 hereto which incorporated herein by reference.

ARTICLE 2. PROVIDER

The Services shall be provided by Comcast Business Communications, LLC or its applicable subsidiaries or Affiliates (“Comcast”).

ARTICLE 3. CUSTOM INSTALLATION FEES

Once Comcast accepts a Service Order Agreement for Services, Comcast will invoice Customer for all Custom Installation Fee(s). Customer will pay the Custom Installation Fee(s) within thirty (30) days of the invoice date unless a payment schedule is specified in the applicable Service Order Agreement.

ARTICLE 4. PROVISIONING INTERVAL

Following the Customer's acceptance of a Service Order Agreement, Comcast shall notify Customer of the Estimated Availability Date applicable to that Service Order Agreement. Comcast shall use commercially reasonable efforts to provision

the Service on or about the Estimated Availability Date; provided, however, that

Comcast's failure to provision Services by said date shall not constitute a breach of the Agreement.

ARTICLE 5. SERVICE REQUIREMENTS

In order to provide the Service at a Service Location, the Service Location must have connectivity to the Internet or a private Ethernet network (“**Underlay Connectivity Service**”). The Underlay Connectivity Service must be ordered from Comcast and may be pre-existing or ordered in conjunction with the Service. Notwithstanding the foregoing, if the Service configuration requires multiple Underlay Connectivity Services:

- (A) one underlay must be an Underlay Connectivity Service provided by Comcast; and,
- (B) the other Underlay Connectivity Service(s) may be provided:
 - i. by Comcast; or,
 - ii. by the Customer as long as the Customer-provided Underlay Connectivity Service(s) meets the technical specifications provided by Comcast. Comcast reserves the right to refuse to use an Underlay Connectivity Service with the Service that does not meet the Comcast technical specifications.

ARTICLE 6. TERMINATION CHARGES

6.1 The charges set forth or referenced in each Service Order Agreement have been extended to Customer in reliance on the Service Term set forth therein. Notwithstanding anything to the contrary in the Business Services Customer Terms and Conditions the following Termination Charges shall apply to Dedicated Internet Service.

6.2 Termination Charges for Services.

- (A) Subject to Sections 6.2(C) and 6.2(D), in the event that a Service is terminated following Comcast's acceptance of the applicable Service Order Agreement, but prior to the Service Commencement Date, Customer shall pay Termination Charges equal to the costs and expenses incurred by Comcast in installing or preparing to install the Service, plus twenty percent (20%).
- (B) Subject to Sections 6.2(C) and 6.2(D), in the event that

a Service is terminated on or following the Service Commencement Date but prior to the end of the applicable Service Term, Customer shall pay Termination Charges equal to a percentage of the monthly recurring charges remaining for the unexpired portion of the then-current Service Term, calculated as follows:

- i. 100% of the monthly recurring charges with respect to months 1-12 of the Service Term; plus
- ii. 80% of the monthly recurring charges with respect to months 13-24 of the Service Term; plus
- iii. 65% of the monthly recurring charges with respect to months 25 through the end of the Service Term; plus
- iv. 100% of any remaining, unpaid Custom Installation Fees.

Termination Charges shall be immediately due and payable upon cancellation or termination and shall be in addition to any and all accrued and unpaid charges for the Service rendered by Comcast through the date of cancellation or termination.

(C) Termination Charges shall not apply to Service terminated by Customer as a result of Comcast's material and uncured breach in accordance with the Business Services Customer Terms and Conditions.

(D) Customer acknowledges and agrees that termination of the Comcast provided Underlay Connectivity Service shall constitute a termination of the Service and Customer shall pay Termination Charges with respect to the Service as provided herein; provided that, if Customer terminated such Underlay Connectivity Service as a result of Comcast's material and uncured breach in accordance with the Business Services Customer Terms and Conditions applicable thereto, then Customer will not be obligated to pay Termination Charges with respect to the Service.

7.1 **Portability**. Customer may terminate an existing Service (an "Existing Service") and turn up a replacement Service (i.e., activate Service at a different Service Location) (a "Replacement Service") without incurring Termination Charges with respect to the Existing Service, provided that: (A) the Replacement Service must have a Service Term equal to or greater than the remaining Service Term of the Existing Service, but in no event less than twelve (12) months; (B) the Replacement Service must have monthly recurring charges equal to or greater than the monthly recurring charges for the Existing Service; (C) Customer submits a Service Order Agreement to Comcast for the Replacement Service within ninety (90) days after termination of the Existing Service and that Service Order Agreement is accepted by Comcast; (D) Customer reimburses Comcast for any and all installation charges that were waived with respect to the Existing Service; and (E) Customer pays the actual costs incurred by Comcast in installing and provisioning the Replacement Service.

ARTICLE 8. TECHNICAL SPECIFICATIONS AND PERFORMANCE STANDARDS

The technical specifications and performance standards applicable to the Service are set forth in Schedule A-1.

COMCAST BUSINESS SERVICES
PRODUCT-SPECIFIC ATTACHMENT
ACTIVECORESM MANAGED ROUTER SERVICE

SCHEDULE A-1
SERVICE DESCRIPTIONS & TECHNICAL SPECIFICATIONS

Comcast’s Managed Router Service (“Service”) will be provided in accordance with the service descriptions and technical specifications set forth below. The Service consists of two components: the Router Service and the Manage Service, each of which are described below:

A. ROUTER SERVICE

The Router (defined below) sits between the Customer Local Area Network (“LAN”) and the Wide Area Network (“WAN”). The Router Service can support connectivity speeds from 1Mbps to 10 Gbps. The Router can support a single connectivity solution, a dual-homed solution, or a high availability solution. The Router has a Layer 3/4 stateful firewall. The stateful firewall performs inspection and keeps track of each connection in the state table.

1. Technical Specifications

The Router Service is a service delivered via a platform that utilizes a service-specific piece of equipment designed and programmed to deliver router services (“Router”).

- 1.1 Router Service includes a Router that is installed by Comcast at the Service Location. The Router is owned by Comcast and leased to the Customer.
- 1.2 Router Service supports several routing protocols including BGP, Static, VRF and IPv4.
- 1.3 Router Service supports a stateful firewall and access control lists.
- 1.4 Router Service supports dynamic NAT with PAT, 1:1 NAT and persistent NAT.
- 1.5 Router Service supports DSCP-based prioritization and egress traffic shaping and policing for QOS.

2. Technical Support and Maintenance

Comcast provides the following Service Level Objectives for the Service, including mean time to respond, and mean time to replace.

2.1 Mean Time to Respond

Mean Time to Respond is the average time, measured on a calendar month basis, required for Comcast to begin troubleshooting a reported fault. The Mean Time to Respond objective is fifteen (15) minutes from the earlier of receipt of a fault notification or from the time a trouble ticket is opened with Comcast.

2.2 Mean Time to Replace

Mean Time to Replace is the average time, measured on a calendar month basis, required to ship a replacement Router to the applicable Service Location. The Mean Time to Replace objective is as stated below for Router failure from the time a trouble ticket is opened with Comcast. Replacement Router for:

- On-Net Service Locations will be brought to the Service Location by the Comcast technician replacing the Router.
- Off-Net Service Locations will ship from a central warehouse Monday – Friday (excluding national and state holidays) – 8:00am to 5:00pm, eastern standard time (“**Business Days**”). Please see details below.

Mean Time to Replace a Router	
On-Net Services*	Same day replacement
Off-Net Services**	Next day replacement

*“On-Net Services” means geographical locations where Comcast currently provides Services through its Comcast network.

**“Off-Net Services” means geographical locations that are outside of Comcast’s service area and/or geographical locations that are within Comcast’s service area, generally, but are not readily accessible by Comcast network facilities. For Off-Net Services, if a trouble ticket is received:

- (i) by 2:00pm (EST) on a Business Day, the replacement Router will be shipped on that same Business Day;
- (ii) after 2:00pm (EST) on a Business Day, replacement Router will be shipped on the 2nd Business Day after the receipt of the trouble ticket;
- (iii) on a Saturday or Sunday, replacement Router will be shipped on Monday; and
- (iv) on a national or state holiday, replacement Router will be shipped the following Business Day after the holiday.

2.3 Technical Support

Comcast provides a toll-free trouble reporting telephone number to reach Comcast Support that operates on a 24x7x365 basis. Comcast provides technical support for service-related inquiries. Technical support will not offer consulting or advice on issues relating to Customer-Premises Equipment (“CPE”) or other equipment not provided by Comcast.

- **Escalation.** Service issues are escalated within Comcast Support as follows: to a Supervisor at the end of the applicable time interval plus one (1) hour; to a Manager at the end of the applicable time interval plus two (2) hours, and to a Director at the end of the applicable time interval plus four (4) hours.
- **Maintenance.** Comcast’s standard maintenance window for On-Net Services is Sunday to Saturday from 12:00am to 6:00am local time. Scheduled maintenance for On-Net Services is performed during the maintenance window and will be coordinated between Comcast and the Customer. Comcast provides a minimum of seven (7) days’ notice for On-Net Service impacting planned maintenance. Emergency maintenance is performed as needed without advance notice to Customer. Maintenance for Off-Net Services shall be performed in accordance with the applicable third party service provider rules. Therefore, maintenance for Off-Net Service may be performed without advance notice to Customer.
- Comcast provides certain Comcast Equipment, including the Router, for provisioning its Services. Comcast will retain ownership and management responsibility for this Comcast Equipment. Comcast Equipment must be used only for delivering Services.

Customer shall bear all expenses incurred, e.g., dispatch/labor costs, where a Service Interruption is found to be the fault of Customer, its end users, agents, representatives, or third-party suppliers.

3. Customer Responsibilities

Customers have the following responsibilities related to the installation, support, and maintenance of the Service:

- Provide an operating environment with temperatures not below fifty-five (55) or above eighty-five (85) degrees Fahrenheit. Humidity shall not exceed ninety (90) percent at eighty-five (85) degrees Fahrenheit.
- Provide secure space sufficient for access to one (1) standard, freestanding, equipment cabinet at each of the Customer facilities, no farther than fifty feet from the Customer firewall or switch interface.
- Provide a pull rope in any existing duct that Comcast is to use and ensure existing duct is serviceable for Comcast use.
- Provide UPS AC power equipment, circuit sizing to be determined, if applicable.
- Provide emergency local generator backup service, if applicable.
- Provide access to each location for regular (8am - 5pm) and emergency (24 hour) service and maintenance of Comcast’s equipment and facilities.
- Provide a point of contact (POC) for installation, service activation and maintenance activities, if any.

4. Emergency Blocking

The parties agree that if either party hereto, in its reasonable and sole discretion, determines that an emergency action is necessary to protect its own network, the party may, after engaging in reasonable and good faith efforts to notify the other party of the need to block, block any transmission path over its network by the other party where transmissions do not meet material standard industry

requirements. The parties further agree that none of their respective obligations to one another under the Agreement will be affected by any such blockage except that the party affected by such blockage will be relieved of all obligations to make payments for charges relating to the circuit(s) which is so blocked and that no party will have any obligation to the other party for any claim, judgment or liability resulting from such blockage.

B. MANAGED SERVICE

Comcast will create a custom configuration for the Customer's Router Service to meet the needs of the Customer's Local Area Network ("LAN"). Specifically, Managed Service includes the following:

1. **Managed Onboarding:** Comcast will sponsor a kick-off call with the Customer to explain the Router delivery process and what is required from the Customer.
2. **Professional Network Design:** Customer will provide detailed information on its LAN and/or Customer's desired configuration specifications to Comcast in a manner determined by Comcast. Comcast will document the technical information into an ACD and the Customer will review and either confirm that the ACD is correct or provide modifications thereto within five (5) business days of Customer's receipt of the ACD (the "Review Period"). If Comcast does not receive a response from Customer to the proposed ACD prior to the end of the Review Period, the ACD shall be deemed approved. Comcast will create the customized configuration for the Router Service, based on the Customer-approved ACD.
3. **Managed Install, Test and Turn-up:** When Comcast installs the Router, the configuration created for the Customer will be loaded on the equipment and Comcast will test the same. Following the Service Commencement Date, Comcast will provide Customer with a site birth certificate which will include service details and test results.
4. **Network Proactive Monitoring and Management:**
 - 4.1. On and after the Service Commencement Date, Comcast will proactively monitor the Router Service 24/7/365 and will pull alarms from the Router. If the Router creates an alarm, Comcast will monitor the alarm for up to fifteen (15) minutes per occurrence. If, within such fifteen (15) minutes, the alarm does not stop, Comcast will send an alert to the Customer for specific, Router Service impacting alarms and will open an internal ticket and begin to troubleshoot the issue.
 - 4.2. **COMCAST DOES NOT PROVIDE MONITORING OF SECURITY EVENTS, ANY SECURITY EVENT MITIGATION, OR ADVICE REGARDING SECURITY ISSUES OR THREATS.** Upon request by Customer, Comcast will modify the configuration of the Router Service in accordance with specifications provided by Customer to attempt to mitigate security events and security threats identified by Customer. Comcast's sole obligation is to implement the configuration settings requested by Customer. This Service is provided on a commercially reasonable efforts basis only and Comcast makes no guarantees with respect to the detection or blocking of viruses/worm/malware or any other types of attacks and is not responsible for any such malicious data that may be transmitted over the provided network.
5. **On-Going Solution Support:** Comcast will support Customer-requested configuration changes, in accordance with Comcast's then current configuration change policy (the "Configuration Change Policy") which Comcast shall provide to Customer, upon request. Customer acknowledges and agrees that the Configuration Change Policy limits the number of configuration changes that Customer may make with respect to a given Service Location in a given year. After the total allowable configuration changes permitted by the Configuration Change Policy have been exhausted, Comcast may invoice the Customer for configuration changes in accordance with the Configuration Change Policy.
6. If a Comcast vendor develops software updates and/or security patches for such vendor's Router which Comcast uses to provide the Service, Comcast will upload such software updates and/or security patches to the applicable equipment to the extent Comcast determines, in its sole discretion, that such software updates and/or security patches are necessary. Updates or patches that are viewed as critical may require immediate action and will be considered emergency maintenance as described above. For the avoidance of doubt, Comcast shall have no obligation to develop software updates or security patches and its only obligation under this paragraph is to install updates and security patches developed by its applicable vendors to the extent Comcast determines, in its sole discretion, that such software updates and/or security patches are necessary.